



U.S. Department
of Transportation
**Research and
Special Programs
Administration**

400 Seventh St., S.W.
Washington, D.C. 20590

**IAEA CERTIFICATE OF COMPETENT AUTHORITY
SPECIAL FORM RADIOACTIVE MATERIALS
CERTIFICATE NUMBER USA/0242/S, REVISION 5**

This certifies that the source described has been demonstrated to meet the regulatory requirements for special form radioactive material as prescribed in the regulations of the International Atomic Energy Agency¹ and the United States of America² for the transport of radioactive materials.

1. Source Identification - Monsanto Research Corporation Model 24154-C source manufactured prior to December 10, 2001.
2. Source Description - The source is a tungsten inert gas welded double encapsulation constructed of Type 304 stainless steel. It is in the form of a cylindrical sleeve with an outside diameter of 35.0 mm (1.375 in), an inside diameter of 28.1 mm (1.105 in), and a height of 12.7 mm (0.500 in). Sources are to be manufactured in accordance with Monsanto Research Corporation Drawing No. C24154-AC00, Rev. 0 (attached).
3. Radioactive Contents - Not more than 0.037 TBq (1.0 Ci) of Americium-241 as an oxide mixed with powdered neutron producing target material.
4. Quality Assurance - Records of Quality Assurance activities required by Paragraph 310 of the IAEA regulations¹ shall be maintained and made available to the authorized officials for at least three years after the last shipment authorized by this certificate. Consignors and consignees in the United States exporting or importing shipments under this certificate shall satisfy the requirements of Subpart H of 10 CFR 71.
5. Expiration Date - This certificate expires December 31, 2007.

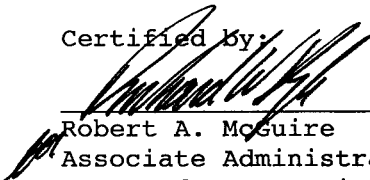
¹ "Regulations for the Safe Transport of Radioactive Material, 1996 Edition (Revised), No. TS-R-1 (ST-1, Revised)," published by the International Atomic Energy Agency (IAEA), Vienna, Austria.

² Title 49, Code of Federal Regulations, Parts 100 - 199, United States of America.

CERTIFICATE USA/0242/S, REVISION 5

This certificate is issued in accordance with paragraph 804 of the IAEA Regulations and Section 173.476 of Title 49 of the Code of Federal Regulations, in response to the petition and information dated May 1, 2002 and August 2, 2002 submitted by Schlumberger, Sugar Land, TX, and in consideration of other information on file in this Office.

Certified by:



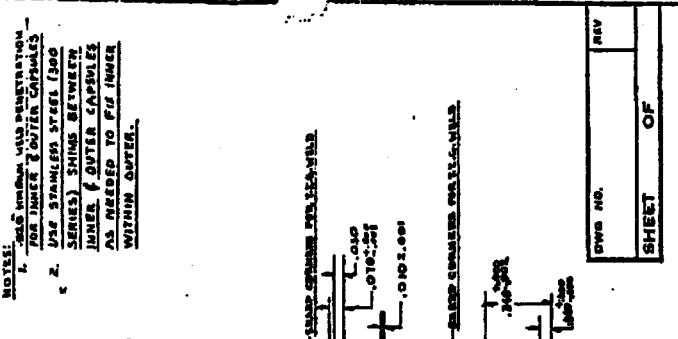
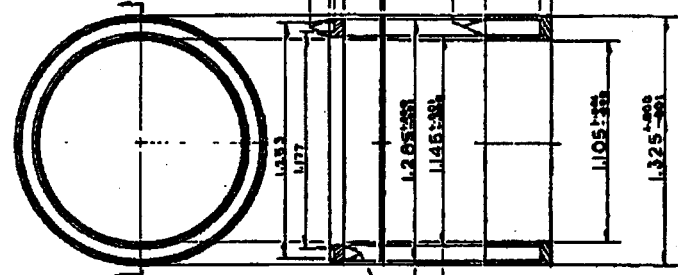
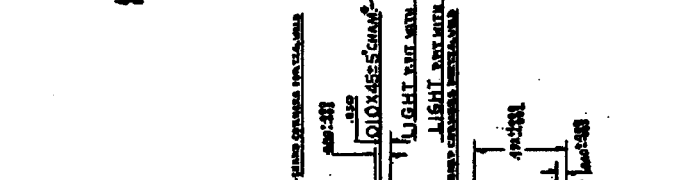
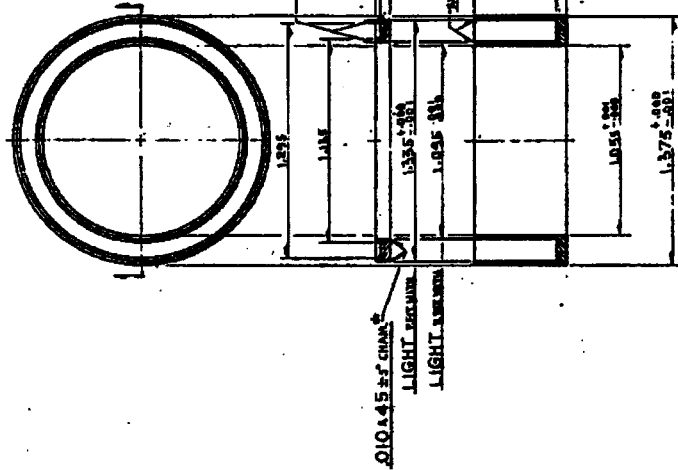
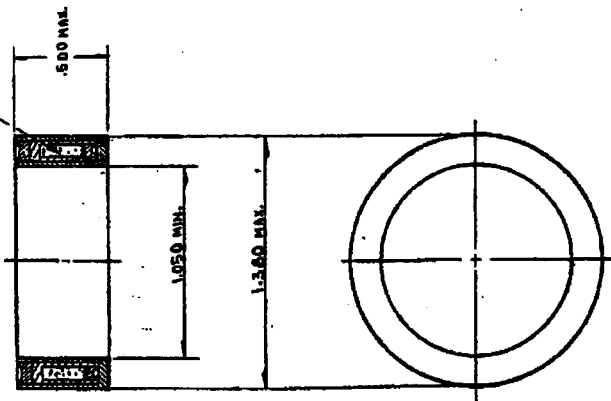
Robert A. McGuire
Associate Administrator for
Hazardous Materials Safety

JAN - 8 2003

(DATE)

Revision 5 - Issued to extend the expiration date.

ACTIVE MATERIAL



OUTER CAPSULE

INNER CAPSULE

DESIGN NO.	REV
SHEET	OF

- NOTES:
1. 304 STAINLESS STEEL PENETRATION FOR INNER & OUTER CAPSULES
 2. 304 STAINLESS STEEL (300 SERIES) SHIMS BETWEEN INNER & OUTER CAPSULES AS NEEDED TO FIT INNER WITHIN OUTER.

NOTICE

This is the property of Monsanto Research Corporation and it will be returned without representation or compensation at any time upon request by the company in the possession of the recipient. It must be properly safeguarded against release or disclosure to anyone except those employees who receive it for the job. The recipient must keep it confidential and require all other employees to keep it confidential. The information contained herein

* VISUAL INSPECTION ACCEPTABLE

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	FRACCTIONS DECIMALS	ANGLES
XX = 1/2	XX = 1/2	XX = 1/2
XXX = 3/4	XXX = 3/4	XXX = 3/4
XXXX = 1	XXXX = 1	XXXX = 1
ALL SURFACES	BY	1/2
MATERIAL 304-304L SS	SS	SS
FINISH	SS	SS

DATE	SIGNATURE	DATE	SIGNATURE
10/1/68	HAN	10/1/68	HAN

MONSANTO RESEARCH CORPORATION RAYSON LABORATORY RAYSON, OHIO		RING-NEUTRON SOURCE MODEL-24154-C		DRAWING NO. C24154-AC0010	
SCALE-2X		WT. ACT.		SHEET OF	